Remarks

Claims 1-23 were originally filed and were the subject of the Office Action dated December 3, 2002. Claims 2-4, 6-8, 11-13, 15-17, and 20-22 are hereby canceled as being drawn to non-elected subject matter. Claims 5 and 14 are hereby canceled in light of the amendments to claims 1 and 10 (removal of non-elected subject matter). Claims 19 and 23 are hereby canceled without prejudice in favor of the remaining claims and in order to expedite their prosecution to allowance. Thus, claims 1, 9, 10, and 18 are hereby presented.

Claims 1 and 10 are hereby amended to remove non-elected subject matter. Claims 5 and 14 are canceled accordingly.

Claims 19 and 23 stand rejected under 35 USC §112, first paragraph, as lacking enablement. The applicants do not agree with this rejection. For example, while it is stated in the office action that it was not routine to achieve expression of exogenous genes in plant cells in 1989, attached hereto are copies of the first pages of several references as follows:

Reference	Publication Date	Subject Matter/Title
WO 87/05629 and EP 0 242 246	September and October 1987	Plant cells made resistant (to inhibitors) by genetic engineering
EP 0 270 356	June 1988	Pollen-mediated plant transformation
Klein et al.	1989	Genetic transformation of maize cells by particle bombardment
Klein et al.	June 1988	Transfer of foreign genes into mtacf using cells with high-velocity microprojectiles
EP 0 290 395 B1	November 1988	Plant tissue transformation
EP 0 292 435 A1	November 1988	Transgenic Zea maize plants regenerated from protoplasts

See also U.S. Patent No. 5,371,003, for example.

These references are evidence of the state of the art in 1989. The applicants wish to further note that while codon optimization is preferred, it is not required. However, in light of the coverage of the remaining clams, and rather than holding up the issuance of the remaining claims by maintaining arguments for claims 19 and 23, claims 19 and 23 are canceled without prejudice in favor of the remaining claims in order to expedite their allowance. Thus, the rejection for lack of enablement has been rendered moot.

Claims 1, 10, 14, and 19 stand rejected under 35 USC §112, second paragraph, as being indefinite. Claims 1 and 10 now more clearly specify that the <u>encoded toxin</u> comprises an insecticidal fragment of SEQ ID NO:8.

The applicants wish to thank the examiner for correctly noting that reference to a toxin encoded by the polynucleotide was inadvertently omitted from claim 10. This is presently rectified. Claims 14 and 19 are canceled without prejudice.

In light of the foregoing, the applicants respectfully request the withdrawal of the indefiniteness rejection.

Claims 1, 5, 9, 10, 14, 18, 19, and 23 stand rejected for obviousness-type double patenting. However, a patent is not identified by number in the office action. Thus, the applicants are unable to address this rejection at this time.

The applicants believe that this application is in condition for allowance, and such action is earnestly solicited.

The Assistant Commissioner is hereby authorized to charge any fees under 37 CFR §§1.16 and 1.17 as required by this paper to Deposit Account 19-0065.

The applicants invite the Examiner to call the undersigned if clarification is needed on any of this response, or if the Examiner believes a telephonic interview would expedite the prosecution of the subject application to completion.

Respectfully submitted.

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JMS/ehm

Attached: Version with Markings to Show Changes Made

Copies of first pages of indicated references:

WO 87/05629 (1987) EP 0 242 246 (1987) EP 0 270 356 (1988) Klein et al. (1989) Klein et al. (1988)

EP 0 290 395 B1 (1988) EP 0 292 435 A1 (1988) U.S. Patent No. 5,371,003

Version with Markings to Show Changes Made

In the Specification:

In the Claims:

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Please cancel claims 2-8, 11-17, and 19-23.

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Please amend claims 1 and 10 to read as follows:

Claim 1 (amended):

An isolated polynucleotide that encodes a *Bacillus thuringiensis* toxin comprising <u>an insecticidal fragment of SEQ ID NO:8</u> [an amino acid sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, and insecticidal fragments thereof].

Claim 10 (amended):

A recombinant microbial or plant cell comprising an isolated polynucleotide sequence that encodes a toxin comprising an insecticidal fragment of SEQ ID NO:8 [comprising an amino acid sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, and insecticidal fragments thereof].